

ABSTRACT

This invention relates to an organometallic polymeric photonic bandgap (OMPBG) material that can be defined by blending block copolymer (BCP) and at least two homopolymers, thereby obtaining an organometallic polymeric photonic bandgap hybrid material with periodic structure by self-assembly, wherein said homopolymers include at least one organometallic homopolymer. The improved material has high reflectivity.